



# The complex problem of monetizing virtual electronic social networks<sup>☆</sup>

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## ABSTRACT

As traditional advertising is losing its impact, both advertisers and the media owners who are dependent upon them are desperately seeking alternative ways to reach consumers and alternative ways to earn revenues by doing so. Although there are many ways to earn money from social network traffic, attempting to do so by treating social networks as just another entertainment medium is doomed to failure. Traditional entertainment and advertising media were unidirectional message-sending systems, where paid messages were pushed at viewers as part of the price they paid for being entertained. In contrast, online social networks are better viewed as milieux, or as meeting places where people congregate to exchange information, observe and emulate each other, assess status, and above all entertain themselves. People are not captives, and when they are not interested, are not entertained, or feel that they are being manipulated, they simply leave. The guidelines for monetizing milieux and meeting places are still being discovered.

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## 1. Introduction

This paper addresses the recent rush towards using social networks to replace traditional media in the distribution of traditional advertising, and attempts to demonstrate that most recent investments in social websites for this purpose are misguided and overpriced. We do not suggest that social networking websites are without value, merely that it will be extremely difficult to monetize online communities through advertising as if they were no more than alternative media, the natural next step in the evolution from wandering bards, to books and newspapers, and then to radio and television.

This paper is written from the perspective of a strategist examining resources and their deployment, potential sources of economic rents, and the defensibility of any potential super-normal rents, and has benefited from the perspective of anthropologist research collaborators and their ethnographic observations. It does not focus on technology or on current usage patterns. Section 2 presents a very short review of networks and social networks. Section 3 presents a review of changes in advertising, Section 4 reviews problems currently faced by advertisers, and Section 5 reviews common

mistakes and inappropriate responses seen from advertisers facing these problems. It suggests that acquisition of online social networking sites aimed solely at replacing traditional media advertising with social networking advertising will have mixed results, and indeed early evidence is mixed at best. Section 6 reviews the numerous ways in which individuals use social networking websites, while Section 7 examines how these uses may lead to revenue and to economic value for their operators. Section 8 examines the conditions needed for websites to capture traffic, which we have called the new 4 Ps of social networking. Section 9 reviews the issues that appear to create the greatest uncertainty, and conclusions and early predictions are shown in Section 10.

## 2. Social networks

### 2.1. Traditional social networks

Social networks are familiar to all who study primates, from baboon troops and gorilla and chimpanzee groups to human societies in all levels of cultural development [17,19,20,40]. A social network can be a group of friends living within a city, or a group of college classmates who remain in frequent contact socially. It can also be a group formed specifically to accomplish a poorly structured set of tasks over time, which then disbands after the tasks are completed, or a support group like a group of pregnant working mothers or cancer sufferers, where older members constantly drop out and are replaced by new entrants.

Humans in all cultures at all times form complex social networks; the term social network here means ongoing relations among people that matter to those engaged in the group, either for specific reasons (like fantasy football, cancer support groups, task forces at work) or for more

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general expressions of mutual solidarity (like families, clans, friends, social clubs). Social networks are validated by shared perceptions of worth, typically expressed as cultural symbols. Likewise, social networks among individuals who may not be related can be validated and maintained by agreement on objectives, social values, or even by choice of entertainment.

Membership in these networks can be relatively permanent (extended families, which endure for lifetimes) or flexible (pregnancy support groups, in which members rotate out after a few months). They involve reciprocal responsibilities and roles that may be altruistic or self-interest based (or a combination of both). Cultural anthropologists have written extensively about these networks, from studies of caste and marriage systems to informal links in the workplace or in the neighborhood. Social networks are trusted because of shared experiences and the perception of shared values or shared needs. For example, new parents will get recommendations from their neighbors for a pediatrician and, over time, for a baby sitter. Friends tell friends about restaurants and movies. It is not yet clear to what extent virtual social networks are trusted or seen as equivalent to traditional networks. Data are conflicting, where users in the age groups between 22 and 30 seem to make more extensive use of online social networks, but may also be more resistant to ads that are inserted into the content of the pages that they are viewing.<sup>1,2</sup>

## 2.2. Online social networks

The newest attempts at the development of social networks have tried to create online social networks without relying upon an initial face-to-face encounter to create the network. Initially, Facebook relied more heavily on face-to-face contact, but increasingly friends are second-order contacts (friends of friends) or higher, or have not yet met (e.g., political action groups, or groups organized to assist in the orientation of freshman before they arrive on campus). In contrast, participants in Second Life, World of Warcraft, Flickr, and YouTube may never have met and may not intend to meet. In this work we distinguish between online support of traditional social networks, such as the use of email to replace telephone calls to schedule a meeting of a monthly book club, and the development of entirely new online communities, as seen in virtual reality websites, gaming websites, and other interactions among individuals who may never actually meet. These entirely new online networks we term virtual electronic social networks, (or ESNs); these networks may have intense interaction, and may achieve significant salience in the lives of their participants, but there may be no interaction among members other than within the ESNs.

Ever since the internet began to develop online “communities,” there has been active debate about whether online communities actually replicate in crucial ways face-to-face networks. Howard Rheingold in a number of articles and books has been the strongest advocate of the depth and power of online communities as “actual” social networks that correspond in important ways to older forms of networking [30]. Others, like John Perry Barlow, have suggested the opposite — that online communities are at best truncated networks, lacking in depth and intensity. In Barlow’s view, participants in online social networks do not have to interact in multiple and complex ways but rather can assume special identities only for online interactions and can also end these interactions more abruptly than in “real life.” For the most part, we agree with Barlow, with the caveat that as internet possibilities expand, the potential for social networks may grow beyond what we see at present. The virtual reality shared world,

Second Life, enables participants to enter a complex world, to choose their avatars (digital manifestation), to build homes and businesses, and to a great extent shape the evolution of that world. Online businesses in Second Life sell prime “real estate,” virtual homes in preferred locations, or sell real music that can be enjoyed offline. Politicians hold press conferences and meetings. The online interactions in Second Life have morphed into actual businesses, with monetary transactions that can be converted into (real world) US dollars, so that actual money is now a part of a virtual environment.<sup>3</sup> Our own experience is that the behavior of individuals in online networks can be very different from the behavior of the same individuals interacting in a more traditional social network. Since its inception over 200 years ago the motto of the London Stock Exchange has been “*dictum meum pactum*,” (translation: “My word is my bond”) and members observed the highest ethical standards in their face-to-face interactions. The members knew whom they were interacting with even after the move to online trading, and yet their behavior towards each other was dramatically different when they abandoned the floor and its face-to-face interaction [14].

Our focus in the rest of this paper will be on internet social networks and virtual communities, in multiple categories that are now popular with individual users. Examples include Facebook and MySpace, LinkedIn, and YouTube. It also includes massively multi-user domains such as the Second Life virtual reality and gamer sites such as World of Warcraft. These have experienced tremendous commercial interest, including a number of high profile and high visibility acquisitions. They are often seen as the next generation of marketing, which we will address below.

## 2.3. Monetizing electronic social networks

A basic premise of this paper is that social networks, whether characterized by physical meetings or online interactions, have their own rules of behavior, which discourage overt attempts at selling. This is not to suggest that no selling is possible in a social network; ads flank the periphery of Flickr’s site for sharing photographs (flickr.com), YouTube’s site for sharing videos (YouTube.com), and of course TripAdvisor’s site for sharing reviews of travel experiences (tripadvisor.com). Mostly, the content on these sites does not attempt to sell anything directly, from one user to another, or even indirectly, with one user recommending products or services to another. Social interactions are not designed to be hijacked and then used for commercial purposes. Readers who doubt this are cordially invited to conduct a simple experiment: (1) Take a social setting, like a class you are teaching, or a dinner party for a friend that you are hosting, or your daughter’s graduation party, and (2) select a product or service in which you have a significant economic interest, ideally as an investor, or one for which you are receiving a promotional fee, and then (3) try to sell the product or service to the participants at your social gathering. Our experience suggests that this will simply be too embarrassing, both for you and the other participants, for you to attempt this a second time.

Based on this premise, we do not consider the large literature on the effectiveness of different approaches to targeting advertising, or the literature on analyzing click-stream data, or the emerging literature on pricing keywords for sponsored search, and the relative merits of pay per impression, pay per click, or pay per sale pricing in sponsored search. The premise of this paper suggests that current forms of advertising will not transfer over to the use of electronic social networks for commercial purposes. If this premise is true, then the large and interesting literature on online advertising has little to

<sup>1</sup> This claim is based on the author’s ongoing research on social networks and corporate behavior, or social networks and the impact of mobile advertising [10,11,38].

<sup>2</sup> The reader interested in more detail on recent work in social network theory and the systems approach to social networks is referred to [1,5,7,28,35].

<sup>3</sup> To see the size of this new economy, its population, and its recent trends and history, visit their information site (secondlife.com/whatis/economy\_stats.php).

tell us about the commercial use of ESNs. On the other hand, if this premise is false, the paper still offers some additional insights into other, non-advertising sources of revenue.

This is not to suggest that the literature on internet marketing, internet advertising, and personalization [2,29,41], or viral marketing and influencers [25,26,39], or social network marketing [15,31,32] are not helpful in understanding emerging trends in advertising and marketing. Rather, we suggest that they are orthogonal to understanding the role of online social networks, which we argue are difficult to harness or to convert to commercial objectives.

### 3. Marketing has changed and traditional push-based advertising is dying

This section suggests that traditional advertising is losing its credibility and its impact. Simultaneously, consumers are altering their behavior in ways that suggest they are better informed, not more poorly informed. The obvious inference is that consumers are gaining their information from alternative sources, and preliminary evidence suggests that they are getting an increasing amount of the information used to evaluate product and service offerings by consulting other consumers, principally through online reviews and electronic social networking websites. Alternatively, one can argue that at least some of the problems are more structural, dealing with consumers' changing attitudes towards paid commercial messages; if so, this would limit some of the opportunities for online advertising as well [9].

#### 3.1. Loss of trust in advertising

The public distrusts advertising messages and advertising is losing much of its impact. Recent experiments by Ariely confirm the extent to which consumers have come to distrust paid advertising and come to distrust information that is pushed at them from a source that is seen as having an interest in influencing outcomes.<sup>4</sup> This is true whether the provided information comes from a trusted company or a political party. Ariely describes two experiments, both of which are aimed at assessing the extent to which consumers alter their perception of the reliability of the statement based solely on its source.

In one of Ariely's experiments subjects were asked to assess the truth value of a large collection of statements; half were indeed true, but consistent with a slight but well known bias towards trust subjects accepted about 55% of the statements. The willingness to accept the statements dropped significantly, and the fraction accepted was closer to one third, when the statements were attributed to the Democratic Party, the Republican Party, or to Procter & Gamble. Interestingly, the willingness to accept statements from either party was not significantly better among members of that party than among members of the opposition party. Equally interestingly, this lack of trust was evidenced in the rejection of statements that had nothing to do with candidates, with the policy of either party, or with products from P&G or its competitors.

In a second experiment, subjects read a review of a stereo system and then listened to the stereo and were asked to rate it. In one case subjects were told that the review was from a highly regarded stereo store close to MIT and in another case they were told that the review was from Consumer Reports. The wording of the review and the listening conditions for the stereo were identical in both cases. Subjects were asked to evaluate and rate the stereo after listening to it. Those who believed the favorable review was from Consumer Reports actually gave the stereo significantly higher assessments after listening.

Ariely describes the collapse of credibility of paid messages as an example of the "Tragedy of the Commons" [23]. In the traditional tragedy of the commons, all households start by grazing a single cow,

the commons supports all cows, and every household has enough milk. A single resident decides to graze two cows; the decrease in the welfare of each cow is small, no household suffers significantly, and the individual with two cows is almost twice as well off as he was before his addition of the second cow. One by one, each of his neighbors adds a second cow as well, until ultimately the common land is over-grazed, each cow is near starvation and gives very little milk, and everyone is worse off than before. Ariely argues that as long as any single advertiser is tempted to over-claim, over-grazing in the commons of consumers' trust, consumers' trust will be weakened, additional advertisers will be tempted to make exaggerated claims in order to have an impact on consumers' perceptions, and ultimately each advertiser will be forced to over-promise and to over-claim. This will effectively over-graze the commons of consumer trust.

#### 3.2. Organic informedness in place of traditional advertising

Consumers increasingly make their fine-tuned purchasing decisions based on their strong individual preferences, and consumers are now far better informed about their options than they were previously. Consumers know what is available, they know what it costs, and they know what they want [12,13].

Our own data and analyses as well as those of other researchers (e.g., [15,31]) support the fact that the increase in consumer informedness is real, that it significantly alters consumer behavior, and that its effects are complex and vary by category and vary with the nature of the consumer's objectives.

- In categories where consumers seek to avoid bad experiences, it is the absence of negative ratings (rather than the presence of positives) that correlate with sales [11].
- When consumers seek delight and are willing to pay premium prices, it is the strength of the best reviews that predict sales rather than the expected strength of the average ratings [12].

Both effects suggest an increasing role for true awareness of the full range of choices, including prices and product attributes.

The available information indicates that informedness alters customers' shopping behavior even for purchases that are made in traditional physical venues. When shopping for cars, the vast majority of consumers perform some type of online comparison shopping before visiting a dealership; this is true even though car purchases are rarely made fully online today. Likewise, our previous studies indicate that informedness alters beer purchases, although for reasons ranging from shipping costs to state regulations very little beer is actually bought or sold online. The correlation between user behavior and the content of specific online social content reviewing sites suggests that online content contributes to organic informedness, the state of consumers *just knowing*, without commercial advertising, and knowing in far more detail than is normally available through commercial advertising [11]. This suggests that to a great extent organic informedness is not just augmenting but frequently is replacing paid corporate promotions.

### 4. The decline of advertising reach, along with decline in credibility

There are now more media choices for the viewer. First there were three national network television channels, next came small independent stations. Then cable TV provided still more choice. Now cable subscribers can have access to well over 100 channels; the addition of *on demand* capability adds hundreds more choices. Rarely does a significant portion of a potential market for a product view the same shows, tremendously diluting the impact of media for the delivery of advertising messages. It is widely observed that the TV audience is increasingly fragmented into large numbers of smaller special interest audiences.

<sup>4</sup> This section is based on personal communication and recent and unpublished work by Professor Ariely while he was at MIT's Media Lab. For a more detailed treatment of his work, see [4].

There are new alternatives to media broadcasts, such as iPods, DVDs, and video games, reducing the amount of time spent watching traditional television broadcasts.

- Network TV viewers are down 15% over the last 2 years and this number grows to 22% for younger (14–22) people. Cable TV is more tightly targeted than network TV and ads appeal to smaller numbers of viewers, but viewers who are supposedly more interested. And TV is declining in favor of various podcasts, games, and other online sources of entertainment directly available on PDAs and computers; perhaps this is why the decline is greatest among young males.<sup>5</sup>
- Some formats of broadcast television have suffered more than others. Broadcast national and local news, both networks and cable, have seen their viewership collapse; after the evening news destroyed the afternoon metropolitan newspapers throughout the United States, they have since largely been replaced by a shift to on-demand internet news. *The State of the News Media 2006* (An Annual Report on American Journalism) notes that although morning news also suffered, evening news viewership over all networks declined from approximately 52 million viewers in 1980 to approximately 27 million today.<sup>6</sup> The Washington Post reports a similar loss of television viewers to the internet.<sup>7</sup> The last two years have been especially brutal, with networks news down from 38% to 30% and local news viewership down from 64% to 56% in just the past two years.
- Newspapers continue to lose readers to websites as well.<sup>8</sup>
- And for some age groups the loss has been even more dramatic. "... for the core video gamer demographic, 18–34 males, TV consumption has declined by roughly 12% while spending 20% more time playing games. And when people do watch TV, they TiVo through the ads, talk on the phone and/or surf the Internet."<sup>9</sup>

## 5. Misinterpreting the data, misplacing the bets

It is easy and comforting for advertisers and their agencies to believe that the failure of advertising is caused by technology (e.g., TiVo) or by media fragmentation rather than by consumers' loss of interest in current media choices. Likewise, it is easy and comforting to believe that the failure of advertising is caused by technology, media, and other alternatives rather than a growing distrust of all paid push-based communications. These mistakes result in simplistic search for alternative media as the easiest response to the belief that it is current media that are failing them, not consumers' unwillingness to accept their message. Media giants, advertisers, and their agencies all do want to believe that the problem is that they are pitching their message via the wrong channels.

The belief that the problem is with the media and not with the message is driving advertisers and their agencies into a frenzied search for alternative media. This search for alternative means to deliver the same message does much to explain the very high and potentially risky valuations on Facebook, MySpace, and YouTube:

- YouTube is still exploring business models that enable it to avoid litigation for the use of material that it does not own and to earn a profit. And yet this high-cost, low-revenue, litigation-prone<sup>10</sup> start-

up with an uncertain business model was recently acquired by Google for \$1.65 billion, based on the expectation that as a social network website it would produce significant revenues going forward.

- MySpace was acquired by News Corp for \$580 million, with a similar and similarly vague value proposition. Several months later, there was little data to support the value of MySpace, either to News Corp or anyone else.<sup>11</sup>
- Microsoft acquired 1.6% of Facebook for \$240 million, a very reasonable sum given its potential use to Microsoft, although one that places the improbably valuation of \$ 15 billion upon Facebook. We explore this in Section 7.5.

The Economist is especially harsh in their assessment, arguing that while online social networks will be everywhere, it is not at all clear that they represent viable businesses or viable business models. It is not clear to what extent revenues on these websites are expected to come from membership fees, corporate sponsorship of messages, traditional advertising, or other business models. News Corp's initial press release about their purchase of MySpace emphasizes "... their commitment to expand its Internet presence by offering a deeper, richer online experience for its millions of users." Google's oddly similar initial press release describing their rationale for buying YouTube discusses "... a successful brand and passionate community. The combined companies will focus on providing a better, more comprehensive experience to users..." Neither provided much information about what is actually planned, what services will be provided, or who would pay for them or why.

The stated hope for both acquisitions is that advertising revenue will pay for and thus provide justification support for the prices paid for each site. But how this will happen is left vague in both press releases since neither News Corp nor Google really knows how this anticipated advertising revenue would be generated. Since users do not go to those sites for advertising-based content, the assumed huge advertising revenues may not materialize. Likewise, the assumption that social networks are just new media, through which old advertising strategies can be executed, seems questionable at best. Google has experimented with bottom banners during the initial few seconds of a YouTube video [24], but these do not appear to have been widely implemented. Google continues to plan wider use of advertising on YouTube [34], but at present advertising on YouTube still seems quite limited. Upbeat reports continue to be written about Google and Hulu, but the question of how to convert these into viable businesses relying upon demonstrably effective advertising remains unanswered. Likewise, there are some indications that YouTube is doing a better job of pulling unauthorized use of copyright material, and that YouTube and the TV networks are exploring revenue sharing models, but until the revenue from YouTube advertising becomes significant it will be difficult to assess how these revenue sharing models will work out.

At present the purchases still have an all-too-familiar resemblance to the wild escapades of the dotcom era when fortunes were paid for sites with no revenue stream and no strategy for generating revenue on a regular and sustained basis. This is not to say that these websites are without value, or even that they are without considerable value; it merely states that no compelling value proposition has yet been disclosed. It is especially true that directly replacing mass media advertising revenues with advertising revenues from electronic social networks seems implausible over the long term, despite whatever early revenue successes may initially be observed. If viewers discount commercial content displayed in television ads it is likely that they will soon come to discount commercial content displayed on websites like

<sup>5</sup> [itfacts.biz/index.php?id=P968](http://itfacts.biz/index.php?id=P968).

<sup>6</sup> [stateofthenewsmedia.org/2006/narrative\\_networktv\\_audience.asp?cat=3&media=5](http://stateofthenewsmedia.org/2006/narrative_networktv_audience.asp?cat=3&media=5).

<sup>7</sup> [washingtonpost.com/wp-srv/politics/polls/wat/archive/wat061900.htm](http://washingtonpost.com/wp-srv/politics/polls/wat/archive/wat061900.htm).

<sup>8</sup> [usatoday.com/money/media/2006-05-08-newspaper-circulation\\_x.htm](http://usatoday.com/money/media/2006-05-08-newspaper-circulation_x.htm).

<sup>9</sup> [doublefusion.com/advertisers-media-buyers/market-overview.php](http://doublefusion.com/advertisers-media-buyers/market-overview.php).

<sup>10</sup> Not surprisingly, Viacom and others have indeed recently sued Google for copyright infringement by YouTube; for example, see the article in the New York Times, [nytimes.com/2007/03/14/business/14viacom.web.html?ex=1331524800&en=e9679584c2827550&ei=5088&](http://nytimes.com/2007/03/14/business/14viacom.web.html?ex=1331524800&en=e9679584c2827550&ei=5088&). For an interesting analysis of the basis of litigation and of YouTube's prospects, you can view the video posted on YouTube that explains the case, [youtube.com/watch?v=rr9S4qkMMk&url=](http://youtube.com/watch?v=rr9S4qkMMk&url=).

<sup>11</sup> [techcrunch.com/2006/11/15/news-corp-myspace-worth-6-billion/](http://techcrunch.com/2006/11/15/news-corp-myspace-worth-6-billion/).

**Table 1**  
Classification of ESN promotional revenue sources and the likelihood of their ultimate success.

	Sponsored content – pulled at user's request	Traditional advertising – embedded in content and pushed without user's request	
Zone of probable success	Full immersion virtual reality (Second Life) There is no reason why a visible presence could not serve as a brand advocate, as long as this was done openly and honestly. There are times when you want to consult a priest or a rabbi, or an Allstate insurance agent or a Merrill Lynch financial consultant. This is participation in a virtual world, not advertising.	Advertising will fail, due to its being viewed as inappropriate in most social settings. As virtual worlds converge towards real worlds, advertising will fail for the same reasons it failed in real worlds.	Zone of probable failure
	Full immersion focused virtual world (World of Warcraft) There seems to be no role for a priest or a rabbi or an insurance agent or a financial consultant. Players in WoW do not come out of character and they do not expect others to do so either.	Advertising will be rejected as totally inappropriate for these domains.	
Professional contacts and information sharing/asynchronous (LinkedIn) Professional content (like FDA test or other test results) directed at professionals, in settings where the material is trusted and has been requested, may be quite effective	Inconclusive, but there is reason to believe that advertising will fail here for the same reason that it failed in traditional media. Still, if the material that is pushed out is trusted and relevant, it may be effective.	Zone of strategic ambiguity	
Social information sharing/ratings and support For information sharing sites like rating services (Ratebeer.com) or support sites (like First Wives World), the role of sponsored content is still inconclusive. Sponsored content may be appreciated, or it may call the honesty and reliability of the site into question.	For information sharing sites like rating services (Ratebeer.com) or support sites (like First Wives World), the role of advertising is still inconclusive. Advertising may be effective in rating services, but viewed as intrusive in support sites.		
Social contacts/asynchronous (Facebook) Social search, or the melding of Facebook friendship networks with search, to answer queries like "where do my friends stay in Chicago", may be very promising, but this is search, not advertising.	Inconclusive, but reason to believe that advertising will fail here for the same reason that it failed in traditional media.		

YouTube. If we would be outraged to find that a friend recommended a car or a dealership to us because he had been paid to do so, it is likely that we would be just as outraged to learn that recommendations from friends in an ESN were thinly disguised commercial messages.

**6. How we use electronic social networks**

There are several different forms of electronic social networks. Some ESNs provide a professional service, like LinkedIn. Some form an electronic community dedicated to sharing information on a specific category of goods or services, such as user-generated reviews to rate travel service providers, restaurants, or other consumer purchases, or user-generated content, like Flickr or YouTube. Still others offer true, general-purpose social interaction, without virtual reality; these are the asynchronous interaction systems like MySpace and Facebook. Finally, there are the virtual reality experiences, like Second Life or World of Warcraft. Each can be used in one or more different ways; we focus here and in the subsequent sections on the individual's intent

when using them, rather than on the technology or the nature of the user interface.

We see six principal forms of usage for electronic social networks, which closely mirror the way we use traditional social networks:

1. *Pure fantasy and entertainment* – Second Life and World of Warcraft are by far the best-known examples of massively multi-user domains dedicated to simultaneous fantasies and game playing. (This corresponds to the first and second rows in Table 1, discussed in Section 10.)
2. *Social interaction* – MySpace and Facebook are by far the best-known examples of online virtual communities, where users can post their homepages, describe their activities, link to and communicate with online friends, and coordinate activities within sub-communities. (This corresponds to row 5.)
3. *Social interaction aimed principally at exchanging information* – This includes sharing reviews on Amazon, a shopping site, or posting reviews on sites that exist only to provide a shared source of

information for the community that posts content. TripAdvisor supports travelers (tripadvisor.com), Chowhound supports and informs *foodies* (chowhound.com), and Ratebeer (ratebeer.com) does the same for serious beer drinkers. (This corresponds to row 4.)

4. *Information aimed at exchanging information among professionals* – This can be information for job search or the pursuit of professional objectives (LinkedIn), in support of professional associations, or in support of working relationships between companies and users, such as physicians and pharmaceutical companies. (This corresponds to row 3.)
5. *Information and Support* – Newly divorced women, pregnant women, men recently diagnosed with cancer, allergy sufferers, bereaved parents, and other groups increasingly use the internet to communicate with each other, share information, and offer mutual support. (This also corresponds to row 4.)
6. *User-controlled content and entertainment* – YouTube (youtube.com) and Flickr (flickr.com) are among the best known examples. This is just another form of media, albeit one with less formal, more user-generated content. (This is not included in the table.)

There is no reason to suspect that this list is mutually exclusive; for example, an individual may use Flickr to share content, for social interaction, and to exchange information and learn useful photographic techniques. Likewise, this list may not be exhaustive, and as the media richness available online increases [16], new uses of social networks may emerge.

## 7. The value proposition of social networking

Just as we see multiple reasons why individuals use social networks, we see multiple mechanisms through which their owners might attempt to monetize them.

1. *Using social networks for ethnographic observation* – Fantasy social networks like Second Life allow users to do whatever they wish, limited solely by their imagination. Observing what they choose to do and not to do may provide insights into their wants and needs, cravings and longings, allowing observers to develop breakthrough innovations in products and services.
2. *Using social networks to collect usage fees* – These can range from monthly subscriptions for World of Warcraft to rent on unreal real estate in Second Life, or for add-on software that increases the capabilities or improves the appearance of the user's avatar. There have been attempts to use Second Life to host virtual and mixed reality meetings. However, given the current limitations of the technology, it is unclear why a virtual meeting would be preferable to current forms of teleconferencing?
3. *Revenues from selling through online social networks* – Websites can earn money either through sales (as Amazon does with the books that it sells) or through linkages with websites that sell (as Amazon does with merchants who are part of the extended Amazon market).
4. *Using social networks to replace traditional advertising* – Websites can earn revenues from ads, near-ads, and concealed ads.
5. *Using social networks to create synergies for other online resources* – If Facebook can be linked to Microsoft's search mechanism, so that MSN's search returns items that are most likely to be relevant based on the searches conducted by my friends, then MSN search becomes far more useful to me than Google, and Microsoft becomes superbly repositioned in its battle with Google for internet supremacy.

Although we attempt to make a sharp distinction between a website earning revenues by selling advertising space or charging fees for participation, the distinction is less clear than this suggests. For example, Second Life may charge rent, a form of usage fee, to a commercial user, who in turn attempts to monetize this investment by

using the space for advertising or billboards. That is, different participants in the same website simultaneously may be attempting to exploit different techniques for monetization. Of course, if it proves impossible to sell ads, then monetization based on renting space for running ads will ultimately fail as well.

We address each of the five proposed monetization techniques in turn.

### 7.1. Using social networks for ethnographic observation

Online social networks do allow individuals to tailor their avatars to have any appearance they wish, from real to idealized, and from idealized to fantastic and unreal. But what does observing these avatars tell us? After a considerable amount of time viewing Flickr postings from Second Life participants, the principal things we could learn about humans' idealized appearance, and about human behavior more generally, would appear to be the following:

- When people can choose their appearance, most of them opt for well-known signs of youth, beauty, and health. Perfectly symmetric features, clear skin without warts or blemishes, and white teeth are a plus.
- Indeed, people choose appearances that resemble sexual caricatures.
- Flagrant displays and sexual signaling, beyond anything currently permissible in our first lives, do get attention. When that fails, personal appearance modifications that cannot be employed in our first lives, such as well-groomed wings and animal ears are effective as well.

It is hard to imagine charging for these insights; some are already self-evident to marketers in first life, while others, particularly wings and ears, are interesting solely *because* they cannot be applied here in our physical world.

Likewise, what can we learn by observing avatars' activities and their behavior? Most of us enjoy sunbathing with a book on a quiet beach. Any of us lucky enough to spend a December evening in a hot tub in Tahoe, with warm water, frigid air, good friends, and a billion stars will always remember the experience. Similarly, memories of a tranquil sail on a quiet lake with a gentle breeze provide much joy. It is not yet clear to most observers why anyone would choose to *pseudo-experience* any of these in Second Life, since the experiences are at best a pale copy, but that is not the point. Quickly scanning Second Life posts on Flickr teaches us that many activities that are deemed enjoyable in our real first life existence, and especially activities that appear to confer high status or to be exclusive, remain popular in Second Life as well. We observe avatars eating, dancing in exclusive clubs, walking through the Armani store, participating in beauty pageants, or skydiving. At present, at least, observing what people are doing in Second Life, as a surrogate means of determining what they wish they were doing in their first life, seems to provide very little new insight into consumers' preferences.

And yet, we are forced to note that communities have been very effective in designing modifications to existing products and in communicating not only their preferences but also their designs to the firms that provided the original products. MIT Professor Eric von Hippel has documented user-designed enhancements in a range of industries, from software to climbing equipment, and from consumer products to surgical implements [36,37]. Arakji and Lang have documented the extent to which innovation in computer games is determined by the communities of online gamers, not solely by the game companies [3]. Feedback from users and "feedback-influenced design"<sup>12</sup> have become significant in a wide array of consumer products, including automobiles (GM's H3 Hummer), fast food (Taco Bell), health and beauty aids (Unilever), and insurance (State Farm).

<sup>12</sup> [forbes.com/forbes/2005/0214/078\\_print.html](http://forbes.com/forbes/2005/0214/078_print.html).

While observing Second Life fantasies may not be the best way to capture these insights, it seems inevitable that some means of harnessing online social networks for product design will occur. We have already observed use of emerging trends in YouTube to inform selection of targets of opportunity for innovative television programming, and perhaps trends in Second Life (e.g., the emergence of Furrries<sup>13</sup>) or in Facebook may likewise suggest product or service offerings here in our first life.

### 7.2. Using social networks to generate usage fees

It seems self-evident that many people around the world enjoy participating in Second Life or competing in World of Warcraft. It is not clear how large the revenues from Second Life subscription fees, unreal estate rentals and purchases, fees for avatar enhancements, or fees for additional avatar capabilities will become. Revenues from the online gaming segment of social networking<sup>14</sup> are growing quickly, now exceed those of Hollywood<sup>15</sup> and are half those of cable television,<sup>16</sup> so the prospects for usage fees from successful social networking websites would appear to be considerable. Jaron Lanier [27] argues that ultimately the net cannot rely solely on advertising and piracy, and that ultimately creative talent will be paid for online access to content. Similarly, it seems plausible that when users find that their online communities are truly valuable they will pay membership fees, as they currently do to participate in religious organizations, social clubs, alumni clubs, and professional associations.

However, charging for content has to date enjoyed only limited success.<sup>17</sup> Both the New York Times and The Wall Street Journal have recently dropped fees for viewing their content online. Indeed, as long as almost everything is available without charge, and subsidized through advertising, charging for content will remain extremely difficult.

### 7.3. Using social networks to sell

Social networks obviously already have been harnessed to sell, or to influence sales, online. Amazon is primarily a shopping site, but its online reviews, posted by its community of shoppers, are a valuable resource upon which other shoppers depend. There is no doubt that materials, both physical goods and information goods, can be sold online. The question that we seek to address is whether or not ESNs can be harnessed as retailing tools.

Some of the claims do appear patently absurd. Faculty do not use the classroom to sell products for their own commercial gain or because they are paid to do so, nor do their students. Few of us have explicitly tried to sell our products at social gatherings, family gatherings, religious services, or country clubs. We do observe what our friends, colleagues, and peers eat, drink, wear, or drive, and we do emulate each other. We exchange recommendations. But social networks are not principally, or even secondarily, retailing opportunities.

This viewpoint is not universally shared. The age groups that frequent Facebook, MySpace, and YouTube frequently “buy stuff online”, but they cannot shop online at these three websites. As USA Today notes, “And that means that there may be billions of dollars being left on the table by the major social networking websites, according to an eye-opening survey to be released today by the American Marketing Association.”<sup>18</sup> Of course, we cannot buy stuff online when we check USAir flights (usairways.com/awa/) or check out TV offerings using AOL (tvlistings.aol.com/) or read the New York Times (nytimes.com/) or check stock prices at the New York Stock Exchange (nyse.com/). Does

this suggest that *all* of these websites are also leaving billions of dollars on the table? How “eye-opening” would that be?

While online sales are important, virtual reality sales efforts seem misguided. At present the code of ethics of the Word of Mouth Marketing Association does seem to be limiting *sock puppeting* and ads masquerading as friends' recommendations, and most commercial activities in Second Life are through transparently corporate activities like virtual stores.<sup>19</sup> The present limitations of selling through Second Life become clear as soon as virtual stores' websites are examined. Yes, it is probably possible to buy a dress or a hat for an avatar on Second Life. Buying clothes for yourself is more difficult; you can't sense the wonderful feel of a hand-finished suit at an online Armani store, nor can you judge precisely how it looks on you with your skin coloration, and of course you cannot get the final alterations done by an expert Armani tailor. Even people who routinely buy their electronic equipment or book their travel online are reluctant to replicate the old shopping experience by going to Second Life. Why would anyone walk through a simulated store to see a simulated 160 GB iPod 6G when he can buy one at Amazon or B&H so much faster? Why would anyone go to a simulated travel agency to see a simulated agent type on a simulated screen when she can book so much faster simply by going to Orbitz or to the airline's own website?

While attempting to sell in Second Life is probably ineffective, and attempting to sell to MySpace or Facebook friends would probably be inappropriate, attempting to sell in themed games like World of Warcraft is positively loathed. Selling will not be the principal revenue source of most electronic social networks. Of course, this does not mean that online sales are unimportant, merely that hijacking massively multi-participant online worlds as retailing opportunities is unlikely to succeed.

An interesting subcategory of sales has emerged, that of selling virtual items, like gaming accessories or clothing for avatars, online in a virtual world [21]. It is not yet clear why people buy these virtual items or how large the market can become.

### 7.4. Using social networks to replace traditional advertising

If social networks generate sufficient traffic, it is tempting to view them as just new media, where the old model of pushing content out on captive viewers remains viable. Social networks are not media but milieux, places where people freely congregate, freely exchange information, freely entertain and inform themselves, and freely leave.

It does seem clear that online reviews, internet referrals from friends, and even posted content can sell. Amazon has found that posting short cuts from the CDs it sells and the ability to “search inside” books it offers both increase sales. Reducing uncertainty increases consumers' confidence and increases their willingness to pay for unfamiliar items. As importantly, the music group Arctic Monkeys has captured the attention of marketing executives around the world by launching itself successfully through its MySpace posting when no record company was interested in offering them a contract.

But what are the lessons from the success of Arctic Monkeys and what are the questions that remain unanswered?

- Is the success of Arctic Monkeys still tied to MySpace in a way that MySpace can monetize once the success of the group has been assured?
- Can the success of Arctic Monkeys be replicated by allowing other popular music groups to post on MySpace and then charging them for referrals or sales or click-throughs to their own website for sales?
- Can the success of Arctic Monkeys be replicated and accelerated by sending paid promotional messages, sock puppeting spam, to other MySpace users, to convince them to purchase the music of other groups that also do not have contracts?

<sup>13</sup> xahlee.org/sl/fur.html.

<sup>14</sup> businessweek.com/innovate/content/aug2007/id20070813\_120384.htm.

<sup>15</sup> breitbart.com/article.php?id=060309211938.c3imi3s8&show\_article=1.

<sup>16</sup> industry.tekrati.com/research/9602/.

<sup>17</sup> news.cnet.com/8301-10784\_3-9816100-7.html.

<sup>18</sup> See “Survey, Social-network sites could also lure shoppers,” *USA Today*, p 1-B, November 24, 2006.

<sup>19</sup> <http://www.womma.org/ethics/code/>.

The answer to the first question would appear to be no; Arctic Monkeys would appear to be free of its initial dependence on MySpace. Over time, the origin of web traffic on ArcticMonkeys.com changed, from traffic that originated on MySpace, to traffic that originated through search, and finally to traffic that went directly to the website by keying in its ArcticMonkeys.com URL. This is tracked by hitwise.com.

Can other groups replicate Arctic Monkeys success? In principle, of course they can, but in practice it should prove extremely difficult. Most great new groups will be offered recording contracts, and most great new groups will want them and will accept them. There will be some groups that will not get contracts and will have to promote themselves through MySpace, but we suspect that their ability to achieve such mass-market successes will be rare.

Finally, can success be accelerated, for a fee, by using MySpace to send a large number of paid referrals, with pseudo-friends sending paid pseudo-endorsements? Of course, this violates the code of ethics of the Word of Mouth Marketing Association. As importantly, it is likely to be detected and rejected, and thus it is likely to be ineffective. Once again, social networks are meeting places or milieux, where participation is voluntary, not broadcast media where messages can be forced out upon millions of passive viewers. While the success of Arctic Monkeys indicates the power of social networks and word of mouth, it does not suggest that social networks can be hijacked, used to distribute advertising, and thus easily monetized.

There are indeed some greatly entertaining and powerfully engaging corporate-funded messages on YouTube:

- Dove soap's self-esteem campaign: <http://youtube.com/watch?v=rj9IPZLPGGr4>
- BMW Madonna "Star" video <http://www.youtube.com/watch?v=e3R9IpAQ6xo>

The sales impact, and indeed the takeaways from these messages, both remain unclear.

Dove, through research at OgilvyOne, learned that many women do not, and cannot, aspire to the anorexic images of supermodels with airbrushed skin and perfectly symmetrical features, and learned that these women feel that products advertised using those supermodels do not speak to them. By using women with more average figures and facial features in their advertisements, Dove hopes to capture those segments of the market that do not respond to idealized models. The campaign on TV and in print media has been successful but it is uncertain whether the YouTube extension will add to that success. YouTube is not seen by typical users as a place to go to look for presentational advertising messages, and most of the intended Dove audience will in all likelihood not even see the Dove message on YouTube, much less respond to it.

As we continue to try to port our first life advertising over to second life experiences, billboards have made their appearance in Second Life. Billboards along the roadside have long been considered eyesores, and are banned in some communities; where they exist motorists drive past them on their way somewhere else. Most users teleport so quickly from one place in Second Life to another that billboards must be strategically (and annoyingly) located to have any impact; apparently, when we can't ignore them, we resent them, and most of the blogosphere's reactions to Second life billboards at present appear to be negative.<sup>20</sup>

Unlike media advertisements, which captive audiences had to view, ESN messages are viewed only if the user wishes to do so. If ESN messages are seen as intrusive, as the Beacon venture between Microsoft and Facebook was, the reaction is overwhelmingly negative.<sup>21</sup> Monetizing media audiences was much easier than mone-

tizing milieux participation. Again, this view is not universally held [6].

#### 7.5. Using social networks to create synergies for other online resources

Linkages between review sites and sale sites may be the most powerful and least intrusive way to harness social networking sites. While Facebook and MySpace have been slow to create linkages to sites that actually sell, others have done this effectively, with both implicit and explicit linkages. TripAdvisor was originally owned by Interactive Corp, which also owned hotels.com, and it made hotels.com enormously more valuable; travelers who were abandoning their traditional agencies for online search needed a reliable source of information, and TripAdvisor provided it without charge. OpenTable (opentable.com) now has a relationship with Zagat. The relationship between the Beer Yard (beeryard.com) and Ratebeer has been a brilliant success for the Beer Yard, though it does not yet appear to have done much for Ratebeer. A beer lover can go to the Beer Yard's website and with one click can find out what beers have recently arrived. With a second click the potential customer can get directed to Ratebeer and can read reviews from numerous other reviewers, decide if he wants the beer, and if so he can call and reserve a case. This has been great for sales of craft brews at the Beer Yard, and it is probably a harbinger of relationships between sellers and independent user-generated content reviewing sites. We expect to see far more of this in the future, if indeed a way can be found to make it work for both parties, without compromising the trust users have in their rating website.

Microsoft's recent investment in Facebook could still turn into the most subtle attempt to create synergies that we have seen so far. Google is, of course, Microsoft's most feared opponent, and at present 98% of Google's revenues come from paid search, search results returned to the user on the top of the results page, not because they are most relevant to the user but because the companies listed have paid top dollars for top billing. At some point users will be aware of this, will skip or discount paid search, and Google will need a better business model. Microsoft's investment in Facebook allows it to develop that better business model almost immediately.

With Facebook linkages Microsoft can tell someone what his or her Facebook friends found to be relevant when they searched. Microsoft can also, with the friends' permission, tell the searcher what those friends thought of the products or services that he or she is presently considering. While this would not, in and of itself generate revenues for Microsoft, it would position MSN superbly to outflank Google.

### 8. The new 4 Ps of social network marketing

It would be useful, when trying to predict what it takes to attract a following to a social networking website, to observe what these websites have in common. It appears that all social networking websites that attract a following offer at least two of the following **4 Ps**:

- *Personal* – They are personally relevant. They resonate with a real interest of their participants. Whether the interest group is all newly admitted freshmen of the University of Chicago, or all serious students of beer, or those interested in learning how to deal with a new divorce or how to cope with a newly diagnosed disease, or those interested in learning how to plan a wedding, community websites must provide resonance for their viewers and users.
- *Participatory* – Ultimately, the best social networking websites allow participation. The audience at a play is not a social network, but an acting troupe that selects its plays, understudies and improvises for each other, and then performs is most definitely a strongly interactive social network. When ESNs encourage interaction and active participation they go beyond serving as personalized

<sup>20</sup> [secondlifeherald.com/slh/2007/03/big\\_business\\_ad.html](http://secondlifeherald.com/slh/2007/03/big_business_ad.html).

<sup>21</sup> See [gigaom.com/2007/11/06/facebook-beacon-privacy-issues/](http://gigaom.com/2007/11/06/facebook-beacon-privacy-issues/) or [publishing2.com/2007/12/01/facebook-beacon-a-cautionary-tale-about-new-media-monopolies/](http://publishing2.com/2007/12/01/facebook-beacon-a-cautionary-tale-about-new-media-monopolies/).

traditional media they become more functionally equivalent to social networks and more valuable to their members.

- *Physical* — Many social networking websites appear to offer the possibility of a transition to physical meetings in our real world. Obviously that is central to the mission of all dating websites. But websites as diverse as Ratebeer, Flickr, and World of Warcraft seem to offer their participants opportunities to meet outside the cyberspace confines of the websites. In other contexts, particularly with individuals who have adopted a persona and an avatar very different from their real world selves following up with meetings in person may prove far less attractive.
- *Plausible* — The artificial worlds of Second Life and World of Warcraft offer physical constraints and limitations different from those we experience on earth. Participation and performance require at least some rules, to make them sufficiently plausible to allow users to function. When some gamers started using death as means of free teleportation the rules of death were changed, but World of Warcraft felt compelled to defend the new rules and explain why the change was necessary.<sup>22</sup>

## 9. Major source of uncertainty

While mastering the new 4 Ps may ensure traffic, this by no means guarantees that traffic can be monetized or that the website can produce revenues or profits. We have several sets of questions:

- Can any social networking website attempt to commercialize trust without destroying that trust? Can websites charge for advertising, or receive payments for positive recommendations, without destroying the trust of its users and becoming seen as just another source of paid messages rather than of real conversations of and two-way communications between customers and firms? In brief, can trust be *monetized*, or does the mere attempt to get paid for trust destroy it?
- Can any social networking website attempt to steer traffic without destroying trust? Can it attempt to control interactions to commercialize them without destroying trust?
- Do social networking websites actually move business? Do they deserve to be paid, quite separate from whether or not any mechanism exists to monetize trust?

Questions in the first set remain unanswered and they pose the biggest challenge to commercializing and monetizing News Corp's investment in MySpace. Questions in the second set are closely related; that is, if websites can create business just by steering users, and if users will tolerate content that attempts to steer them, then MySpace, Facebook, and Flickr may have huge untapped value. It is plausible, but uncertain, that in many instances users would abandon websites that were populated by *pseudo-users* who were little more than paid corporate shells.

And yet, we have consistently failed to see patterns in the use of new technology and its transformation of society. The impact of the telephone and the elevator on the nature of work, allowing towering skyscrapers and densely populated urban centers is obvious only in hindsight. Likewise, the impact of the internal combustion engine and the automatic transmission, combined with inexpensive gasoline, in hollowing out many of those American cities, was obvious only after it had occurred. The interaction of VisiCalc with the Apple II contributed greatly to the successful launch of personal computing. It is at least possible that the interaction of electronic social networks with some other technology, perhaps mobile computing and mobile telephony, will be equally transformational in affecting the way we learn about products and conduct commercial transactions.

<sup>22</sup> [worldofwarcraft.com/info/faq/death.html](http://worldofwarcraft.com/info/faq/death.html).

## 10. Conclusions

### 10.1. Forces at work

Any attempt to predict the future of advertising must understand both consumer behaviors with regard to shopping and their behaviors in their use of the internet. Consumers use the net to see what they want and do what they want, when they want it. The net will not support entrapment, and consumers who are escaping ads through TiVo are unlikely to become attracted to full time advertisement programming. The modern consumer views the net as transparent, and community postings and the recommendations of friends will outweigh paid placements, and paid reviews. Placements of products in movies or in video games are likely to be ignored; the presence of advertisements directly into movies or video games will be resented.

Virtual reality websites simply are not ideal for encouraging online consumption or for encouraging consumption in physical space. It's meaningless to drink a beer online, and pointless to attempt to influence my selection of a beer by drinking one online with me. I can't taste anything online, and I know that you can't either.<sup>23</sup>

### 10.2. Predictions

The internet already does and will continue to influence sales.

- Yes, consumers influence each other through posted content.
- Yes, it is possible to sell online. But hijacking social networking websites does not appear to be the most effective way to do so.

Some phenomena are too complex to predict right now. If a truly stunning avatar were to be seen carrying a great new product, or wearing a bold new style, that might indeed influence styles in the real physical world.

Consumer media viewing behavior, consumption behavior, receptivity to advertising, and use of information in purchases are all changing. The changes are profound, and they interact in complex ways that confound easy analysis. The most tempting response among advertisers and among their agencies is to assume that the most significant changes are in media choices and viewing behavior, which require the smallest response — change the venue in which ads appear, and change their format as dictated by the new media. While we do not yet know enough to determine if a change in advertising venue will be sufficient to restore the power of advertising, we suspect that it will not be, and that the high valuations placed on early social networking websites may be irrationally high, even as hedging bets. One thing, at least, is certain: research will continue [8].

### 10.3. Classification of social network promotions

Our treatment of internet advertising is less optimistic than that of many other authors, and may require further treatment. For the purposes of this paper, we focus on a range of forms of *promotional informational activities*, those based on providing information, as opposed to those providing price discounts, or visibility by sponsoring NASCAR racing teams, or visibility by distributing free samples at sporting events. Within

<sup>23</sup> It is certainly true that I cannot at present enjoy a beer online. It is remotely possible that I may be able to enjoy a beer and truly experience it online, or have a meaningful test drive of an automobile online at some time in the future. Philosophers from Descartes and Kant to the present have debated the meaning and even the reality of experience. Science fiction writers made significant contributions to the debate, with novels like *Neuromancer* [18] and *Snow Crash* [33]. The science fiction writers were temporarily trumped by philosophers again, with the Brain in a Bottle hypothesis, which argued that possibly nothing was real, or that we would have no way of knowing if it were real or not. The direct applicability of philosophy to the analysis of perception of beer can be reviewed in [22]. Suffice it to say that at least for now we can sample music and video online, but we cannot sample beverages or test drive automobiles, and that the value of experiencing consumer goods online was not an initial motivation for the acquisition of YouTube or MySpace.

informational promotional activities, we divide the collection of actions into advertising and sponsored content.

1. *Advertising* is the push-based provision of short messages, without user request; it is generally embedded in the media content that the user has chosen to view, such as newspaper pages or television shows. Increasingly, it can be tailored to user profiles, as with pop-ups and banners that are prompted by what the user is viewing, but it is generally not provided in response to users' requests for information on products or services.
2. *Sponsored content* is pull-based, in that it is in response to users' requests for information, and is almost always more finely tuned to individual requests.

This paper assumes that advertising is losing its effectiveness, for two reasons:

- Ads are *losing their viewers*; we no longer have patience for commercials embedded in our TV programming and TiVo over it, and we no longer have patience for pop-ups and banners and employ software to block them whenever possible. To the extent that this is true, moving advertisements to media that provide even greater flexibility and control to viewers will not improve the visibility of advertisements. As importantly, most forms of mass media are themselves losing viewers, compounding the problems faced by advertisers. There is extensive support for this, across all media.
- Ads have *lost their credibility* and much of their ability to influence consumer opinions and consumer decisions; they don't view them because, quite simply, they no longer trust them. While there is less support for this, it appears plausible, and for the purposes of this paper we accept it as well. To the extent that this is true, transferring advertisements to alternative media, or finding alternative means for their distribution, will have but limited impact.

The paper makes less extreme assumptions concerning consumers' response to sponsored content that they have actually requested. It assumes that firms have the opportunity to regain viewers if content is requested rather than pushed out, and that firms have the opportunity to regain some credibility with sponsored content. Still, there is some support for the fact that content provided by firms to describe their own goods and services may have less credibility than content provided by independent rating services.

We divide ESNs into four coarse categories:

1. Some ESNs are *multi-media virtual reality settings*, in which users simulate interactions as if they coexisted in a shared virtual world. The degree of immersion in and intensity of these virtual worlds approaches that of reality as technology improves. At present, most interactions in virtual worlds are social, rather than commercial or professional in nature. Second Life would be the best-known example of the *milieux*.
2. Some ESNs are *multi-media virtual domains*, but do not attempt to mimic reality. These are often not general purpose alternative worlds, but rather dedicated to a single form of interaction. Games like World of Warcraft are the best-known examples.
3. Some ESNs are *dedicated support systems for professional use*. Some professional associations have ESNs, and some networks like LinkedIn serve this function as well.
4. Some ESNs are used primarily for *ongoing social communications*, and while they may permit sharing of audio or video, they are primarily asynchronous textual interactions, like MySpace or Facebook. Increasingly, they are using them to establish their own online communities within a larger network; universities have taken the lead on this but many corporations are experimenting as well.

Again, this paper assumes that the market for push-based advertising will be extremely limited, and that the effectiveness of such advertising will be very limited, regardless of how much money is

currently spent on it. Likewise, it does not rule out roles for sponsored content, embedded as appropriate, although the use of this is minimal today, and although we consider this to be promotion but not truly advertising. Indeed, after wrestling with how to monetize community trust without compromising users' belief in their honesty, integrity, and total commitment to users' needs for over two years, the designers of First Wives World decided that they would have no advertising. Instead they feature an advice box, in which advertisers and sponsors can provide information on any subject the user wants, but only in response to users' specific requests; in addition, other users' assessments and reviews will also be provided along with the sponsored content.

A preliminary classification is shown in Table 1. Material is indicated as either in the zone of probable failure, a zone of strategic uncertainty, or a zone of probable success. Social search, in the lower left corner, is crossed out; it is search, not advertising or promotion.

#### 10.4. Directions for future research

The revenue from text-based ads, banners, sidebars, and other content placed around web pages, is presently very high. Although firms can measure some elements of consumer interaction, such as views or impressions, it is not yet clear that the strategic or tactical impact is high. The actual value received by advertisers needs more careful measurement.

We believe that sponsored content will have higher impact than ads. Firms will benefit more from explaining the true advantages of their products than from trying to convince potential customers through traditional shots of consumers using the products and praising them. Still, Ariely's work suggests that the same review will have greater impact if posted on a professional rating site or a community content site than on the manufacturer's site. This needs more conclusive study.

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